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A plan to evaluate a college-orientation course required of new freshmen at Mt. San Antonio College was developed. It was designed to help students adjust to college, evaluate their interests and abilities, determine realistic vocational goals, and develop effective educational plans. Opportunities for close personal relationships between students and counselors were also provided. Pertinent literature indicated that evaluation, to be meaningful, must be integrated into the development of the course. Requisites for evaluation included: stating course objectives in terms of specific student behavior; evaluation of objectives in terms of student relevance; and determining measurable behavioral changes students would exhibit. Since, because of its loose structure, a rigorous evaluation plan could not be applied to this course, the new plan allowed for course revision as well as evaluation. The plan was comprised of the following developmental stages: stimulate staff to take action by preparing pertinent curriculum data; formulate specific behavioral objectives; establish a way to account for specific behavior of students; delineate teaching techniques that provide motivation, outlining goals, organizing instruction, and grading assignments against an established criterion; develop a pre- and post-test instrument tied to the objectives; and design a student evaluation tool. [Not available in hard copy because of marginal legibility of original.] (MB)

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THE DEVELOPMENT OF A PLAN FOR EVALUATING AN ORIENTATION TO COLLEGE COURSE

A Project Report

Presented to

Dr. Arthur M. Cohen

Graduate School of Education

University of California, Los Angeles

In Partial Fulfillment

of the Requirements for Education 261D

Seminar: The Junior College Curriculum

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by

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LOS ANGELES

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CLEARINGHOUSE FOR
JUNIOR COLLEGE

THE PURPOSE AND ORGANIZATION OF THIS PROJECT

The purpose of this project is to develop a plan for evaluating an orientation to college course which is currently being required of new, community college freshmen at Mt. San Antonio College. In order to develop this evaluation plan, the following formulative steps will be taken.

First, the course itself, Guidance 50 by title and course number, will be briefly reviewed. This review will include a description of existing course objectives, the course format, and student evaluation reports.

Second, a selected review of the literature will be made in order to gain increased understanding of the processes for evaluating an educational program or course. Methods of forming course objectives based on behavioral goals, principles of learning, and methods of evaluating will be researched.

Third, it is anticipated that findings from this review of the literature will point out the need for revisions in the existing course, particularly in regard to more specificity in the listing of objectives. Suggested revisions will be reported.

And fourth, the plan for evaluating Guidance 50, as was the purpose of this project, will be described.

GUIDANCE 50

Guidance 50 is a one-half unit course required of new freshmen entering Mt. San Antonio College. It is offered by the Counseling and Guidance Department and is taught by the counseling staff to their counselees. Each counselor has six sections in the fall semester and three sections in the spring semester. Classes begin the second week of each semester and continue at the rate of one hour per week for nine weeks. As currently revised, students who satisfy the requirements of the course will receive "Credit" for one-half of a semester unit towards the Associate in Arts Degree and those who do not satisfy the requirements of the course will receive "No-Credit." The student's permanent record will reflect his achievements in this course; however, in either case, the grade of "Credit" or "No-Credit" will have no effect on the student's grade point average.

The description of Guidance 50 as listed in the General Bulletin of Mt. San Antonio College is as follows:

> "This group guidance course is required of new day students and includes presentations and class activities to assist students in their (1) adjustment to college, (2) evaluation of interests and abilities, (3) determination of realistic vocational goals, and (4) development of effective educational plans."[1]

The Mt. San Antonio College General Bulletin is listed as a required text.

Course Objectives. The objectives of the course are as follows:

> "To provide an opportunity for new students to obtain assistance in orientation and adjustment to college.
>
> To assist students in the evaluation of their previous educational achievements, and the appraisal of their interests and abilities.
>
> To assist students in the exploration and analysis of occupational opportunities for the purposes of making realistic vocational decisions.

To provide guidance in the development of effective educational plans.

To provide an opportunity for the development of closer personal relationships between students and their counselors."[2]

Methods of Instruction and Evaluation. Methods of instruction include the typical media of lecture, discussion, research assignments, and audio-visual techniques. Students are to be evaluated on the basis of their completed assignments which include a final educational plan report, and on the basis of class participation and attendance. It should be noted that the course as approved by the Curriculum Committee (Mt. San Antonio College Curriculum Committee Minutes 3/28/67) was presented with the understanding that traditional methods of presenting information for mastery by the student and grading standards based on assimilation of such information would be relegated to a lesser position. The prime objectives of the course were summarized as ". . . to involve students personally in meaningful group interaction for resolution of problems concerning adjustment to college and to provide guidance to these students as they deliberate on realistic vocational goals and educational plans."[3]

Class Topics and Activities. As apparent from the course description and the course objectives, the scope of this course is very broad and the intentions very ambitious. Initial topics and activities are designed to orientate the student to college by means of class discussion of student problems and questions. A take-home examination which includes pertinent information regarding college regulations is an initial assignment. The second major emphasis is to provide a means for students to appraise their

abilities and past academic achievements in comparison to other college students. Explanations of test scores and various high school majors are presented to the guidance students for the purpose of providing a frame of reference for students to judge themselves. After this activity, students are urged to re-affirm their original vocational goals or to determine new goals which are, hopefully, realistic and within their reach. A vocational report which requires the student to make a survey of his chosen career is a third assignment. Finally, with this career decision made, at least a temporary one, the student is required to develop a detailed educational plan which outlines his educational program for two or more years. This plan constitutes his final assignment.

Historical and Background Information. This course was developed by the Counseling and Guidance Department during the school year 1966-67. All members of the counseling staff were directly involved in the developmental stages as all were members of various sub-committees which developed the four different topics of the course. It was originally presented to the Curriculum Committee on a graded pass or fail basis, but was revised during the course of their deliberations to be graded on an A-F basis.

In the semester of its first offering, a course outline and packet of materials containing information about the various service areas was prepared and distributed to each student. This packet was varied according to the individual counselor (teacher) wishes and resulted in a monumental clerical task as approximately 3500 packets had to be

prepared in accordance with these variant specifications. A smaller packet with more uniform specifications was developed for use the following school year of 1968-69.

A standing sub-committee of the department oversees the progress of this course and is continually involved in empirical evaluation studies of the "arm-chair" type. Continuous efforts are being made to provide relevant and meaningful activities in these guidance classes.

Evaluation Study Report. At the conclusion of the first semester in the fall of 1967, ten of the fourteen counselors teaching the course participated in an evaluation activity which consisted of administering an objective questionnaire to the guidance students.[4] Approximately 1500 students completed the 32 item evaluation sheets on which they checked a total of 43,104 items. Twelve different class topics; ten different forms, charts or assignment sheets; and ten different teaching techniques were itemized. Students were instructed to mark on the answer sheets one of five scaled responses for each item. These responses were scaled in decreasing order as follows: (1) very helpful, (2) helpful, (3) slightly helpful, (4) not helpful, or (5) not covered.

A distribution of the total number of responses showed that the overall reception of the topics, materials, and teacher techniques was favorable. Total responses tallied as follows: (1) very helpful - 7,754; (2) helpful - 13,885; (3) slightly helpful - 10,651; (4) not helpful - 5,678; and (5) not covered - 5,136. The educational program planning topic received overwhelming support and the topics of four-year college requirements and educational majors were next in favor.

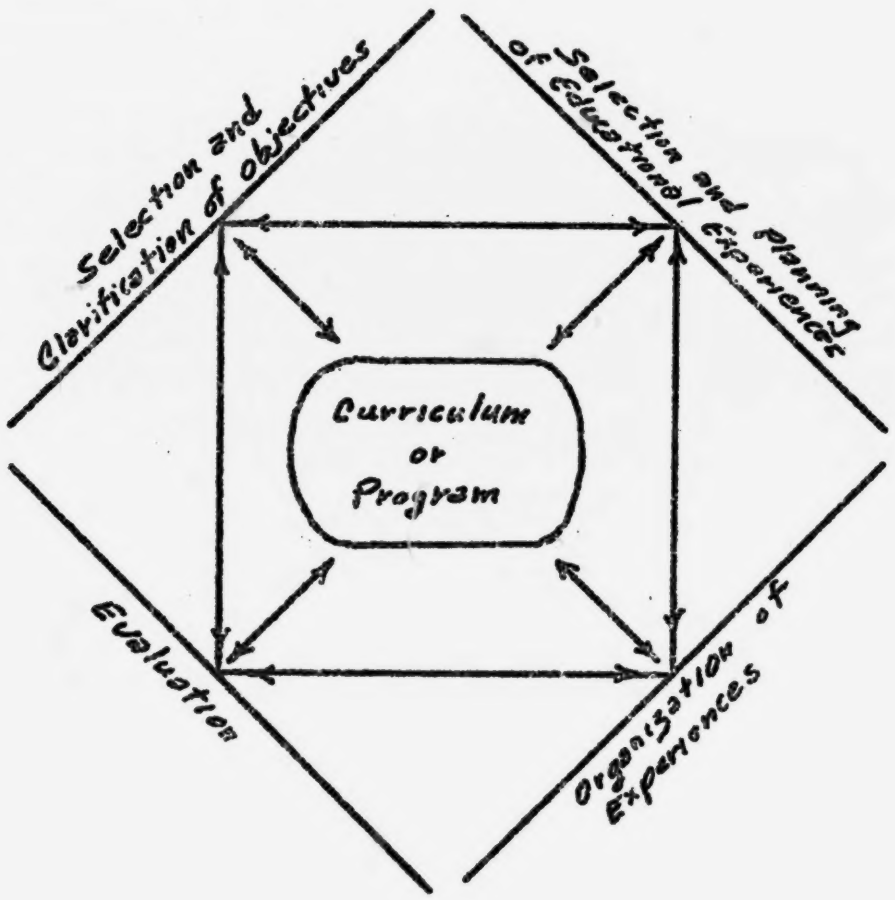
In summary, the responses to the educational planning activities were very good and significantly higher overall than the responses to other topics. In reprospect, it should be noted that the scaled category of "slightly helpful" was interpreted as a satisfactory response and this interpretation is subject to suspicion.

Counselors who did not participate in this evaluation scheme developed their own methods of evaluation. Their findings based on projective techniques which elicited free responses paralleled the findings noted above. These unstructured responses provided additional insight, particularly in regard to teacher methods and techniques. Brief unstructured forms have been popularly used in subsequent class evaluations.[5]

REVIEW OF LITERATURE

Even a cursory review of the literature relating to course evaluation and curriculum revision reveals the need for considering course revisions and evaluations as part of a total course entirety and not as separate items which could be analyzed separately. A well developed course is one in which the goals are developed from the philosophy of the institution, the specific course objectives are listed in terms of student behavioral goals, the teaching media has been developed in congruence with the principles of learning, and the methods of evaluation have been predetermined in terms of the specific course objectives. All of these parts or stages, make up the total course development. Evaluation, then, necessarily means that the course as a whole must be considered to see if it lends itself to meaningful evaluation.

Dressell developed an interesting schematic to identify the various stages of curriculum or program development and to show their interrelationships.[6]



Dressel declares that these stages are interrelated in the study of an instructional program.

> "After the decision is reached to develop, to study, or to revise a program or curriculum, the natural and logical starting point is with the objectives, which should be formally stated but which are sometimes simply assumed by a faculty to be self-evident. Appropriate educational experiences are selected in reference to these objectives and organized into courses, curricula, or procedural patterns. Collection of evidence to appraise the effectiveness of the program in attaining its objectives may then result in revision of the program through modification or replacement of any or all of the elements of the preceding stages: objectives, experiences, organization of experiences, or evaluation."[7]

Tyler refers to rational course planning and execution as follows:

> "Unless instruction is to be merely a haphazard or intuitively guided process, it requires rational planning and execution in terms of the plans. Viewed in this way, instruction involves several steps. The first of these is to decide what ends to seek, that is, what objectives to aim at or, stated more precisely, what changes in student's behavior to try to bring about. The second step is to determine what content and learning experiences can be used that are likely to attain these ends, these changes in student behavior. The third step is to determine an effective organization of these learning experiences so that their cumulative effort will be such as to bring about the desired behavior changes in an efficient fashion. Finally, the fourth step is to appraise the effects of the learning experiences to find out in what ways they have been effective and in what respects they have not produced the results desired. Obviously, this fourth step is educational measurement, or achievement testing. It is an essential part of instruction because without appraisal of the results being attained, the instructor has no adequate way of checking the validity of his judgments regarding the values of particular learning experiences and the effectiveness of their organization in attaining the ends of education.[8]

Corey states that instructional planning and the implementation of instructional plans, on the part of the personnel involved, require:

1. Familiarity with the behaviors that constitute the objectives of the instruction.

2. Familiarity with the physical, scholastic, psychological, and social characteristics of the population to be instructed.

3. Competence in the analysis of gross behavioral objectives.

4. Knowledge of the unique characteristics of various types of instructional environments.

5. Competence in procuring and interpreting "feedback" on the consequences of the instruction.[9]

It is evident from these references that the interrelatedness of instructional planning or course development is of paramount importance. It is also evident from these sources that a heavy emphasis is placed on the need for the formation of meaningful, specific course objectives.

Goals and Objectives. A clarification of terms is necessary before proceeding. One should consider first, the purposes of the institution; second, the broad goals of the instructional programs, and finally, the specific behavioral objectives of the courses. Cohen defines goals as what is to become of the students who attend the junior college and refers to these goals as indicators of the broad range of their abilities. An objective is a specific, observable student action or product of student action. To satisfy the definition, Cohen states that "it must, first specify something the student is to do; second, state the circumstances under which he will do it; and, third, note the degree of accuracy with which he will perform the action.[10] The purposes of the institution consist of those philosophical aims from which the goals and objectives are developed.

Gagné says that "Such a definition is a verbal statement that communicates reliably to any individual (who knows the words of the statement as concepts) the set of circumstances that identifies a class of human performances." He lists "operational definitions" as follows:

1. A verb denoting observable action (draw, identify, recognize, compute, and many others qualify; know, grasp, see, and others do not).

2. A description of the class of stimuli being responded to (for example, "Given the printed statement ab + ac = a(b + c)").

3. A word or phrase denoting the object used for action by the performer, unless this is implied by the verb (for example, if the verb is "draw," this phrase might be "with a ruling pen"; if it is "state," the word might simply mean "orally").

4. A description of the class of correct responses (for example, "a right triangle," or "the sum," or "the name of the rule.")

He further states that "Perhaps the most important implication of this method of defining objectives is that the type of learning to be undertaken, and the required conditions for learning are tremendously clarified."[11]

Under the leadership of Benjamin Bloom, a major undertaking of classifying behavioral objectives has taken place. Hierarchical taxonomies have been developed in the cognitive, affective and the psychomotor domains. Of particular interest are the statements of relationships between the cognitive and affective domains. "In some instances we use changes in the cognitive domain as a means to make changes in the affective . . . In other instances we use an affective goal as a means to achieve a cognitive one . . . ."[12]

Lindvall declares ". . . that statements of the purposes of education are truly meaningful only when they are made so specific as to tell exactly what a pupil is to be able to do after he has had a given learning experience. Such statements are rather typically referred to as specific instructional objectives.[13] In addition to stating specific objectives so that the exact behavior is described, Lindvall emphasizes that the specific objectives should be worded in terms of the pupil -- objectives must be pupil-centered.[14]

Tyler cautions that defining objectives in operational terms does not guarantee a wise choice of educational ends.

> "Although the selection of goals on the part of school, college, or individual teacher is a matter of choice in the light of cherished values rather than a process of objective recognition, there are types of data that can be obtained by the school, college, or instructor that will provide bases for wiser decisions than when choice of goals is made without such information. These include: (1) data regarding the students themselves, their present abilities, knowledge, skills, interests, attitudes, and needs; (2) data regarding the demands society is making upon the graduates, opportunities and defects of contemporary society that have significance for education, and the like; (3) suggestions of specialists in various subject fields regarding the contributions they think their subjects can make to the education of students.[15]

Considerations involved in selecting objectives, according to Tyler are as follows:

1. Objectives worth teaching should be formulated after an analysis of our culture. Grade placement of such objectives is similarly important.

2. Determining the "entering behavior" of students is important.

3. Objectives should be selected about which we know enough to teach.

4. Objectives selected must be relevant to the school's philosophy of education.

5. Objectives must be consistent with our theory of learning.[16]

Dressel declares that some screening of the basis of psychological knowledge and philosophical points of view must be undertaken if the set of objectives finally chosen are to be (1) reasonable in number, (2) consistent with one another, (3) of approximately the same level of generality or specificity, (4) distinctive although in the nature of human behavior not completely independent, (5) descriptive of goals verifiably achievable by means at hand.[17] He lists desirable qualities of objectives as follows:

> Educational objectives vary from very simple to very complex -- either extreme is undesirable.
>
> Objectives may be explicit or implicit -- should be identical for maximum impact.
>
> Objectives may be characterized as intrinsic or transcendent -- transcendental objectives require sustained effort.
>
> Objectives may be achievable or unachievable -- degrees of progress must be realized.
>
> Objectives may be stated in terms of instructor activities and course content or they may be stated in terms of desired student behavior -- objectives of value must point directly to the students.[18]

Not all authorities are as sold on the advantages of delineating specific behavioral objectives. Alkin, for example, at the Educational Testing Service Regional Conference in San Francisco on May 9, 1969, stated that behavioral objectives were not appropriate to all stages of learning, and that evaluation to date has shown no conclusive findings to support the use of behavior objectives. However, he wanted to clarify that he was not in opposition to the concept of formulating specific behavioral objectives; and a concluding comment was that it was "better to establish objectives than not."[19]

A logical progression of study after a review of the literature concerned with the defining and the formation of specific behavior objectives, is to review basic principles of learning.

Learning Principles. The process of establishing specific course objectives is dependent on the consideration and application of learning principles. The interdependency is obvious. For example, Gagné defines learning as

> ". . . a change in human disposition or capability, which can be retained, and which is not simply ascribable to the process of growth. The kind of change called learning exhibits itself as a change in behavior, and the inference of learning is made by comparing what behavior was possible before the individual was placed in a "learning situation" and what behavior can be exhibited after such treatment."[20]

Tyler says that another consideration in choosing objectives is the findings of studies in psychology of learning. Objectives that are not formulated on sound principles of learning will be ignored just as will objectives which are not appropriate for the student's maturation level.[21] Dressel emphasizes the need for considering principles of learning when he declares that students, who do not understand and accept the needs determined for them, will become reluctant partners in their own education. He also declares that the curriculum builder will have greater confidence in formulating specific objectives if he relates his deliberations to a philosophical frame of reference and to the principles of learning.[22]

Gagné identifies forms of behavior and establishes conditions for learning in a hierarchy complex. His hierarchy of behaviors has this appearance:

The learning of

Problem Solving and Strategy-Using

require the pre-learning of:

Principles

which require the pre-learning of:

Concepts

which require the pre-learning of:

Associations

which require the pre-learning of:

Chains

which require the pre-learning of:

Identifications

which require the pre-learning of:

Responses

The major implication is that these are the categories of objectives to be distinguished, if one approaches the job from the standpoint of differential sets of conditions for optimal learning.[23]

Saupe identifies the following learning principles:

1. "without appropriate readiness a learning experience will be inefficient or learning will not occur."

2. "students learn only what they want or are motivated to learn."

3. "learning proceeds much more rapidly and is retained much longer when that which is to be learned possesses meaning, organization, and structure."

4. "the learner learns only what he himself does."

5. "only those responses which are confirmed are learned."

6. Two principles on transfer of learning which are most significant:
   "transfer can occur only when there is a recognized similarity between the learning situation and the transfer situation."
   "transfer will occur to the extent that students expect it to occur."

7. "attitudes may be changed by increasing knowledge and understanding to the attitude object."[24]

Instruction. Given a review of how to formulate specific behavioral objectives and a review of learning principles upon which these objectives must be founded, the critical phase of instruction cannot be overlooked. Even with the most specific objectives in terms of student behavior and the greatest understanding of learning principles, the instruction could fail if the teaching methods and the teacher are not effective.

Lehmann lists six functions of instruction:

First, motivate the student.

Second, demonstrate to the student just what is expected of him.

Third, select appropriate practice tasks which are extensive and meaningful.

Fourth, provide the student with some satisfaction in his progress.

Fifth, organize the material so the cumulative significance of learning is readily apparent to the student.

Sixth, provide the learner with high standards of performance and means for judging his performance.[25]

Quite obviously, then, objectives, instruction, and evaluation must be in accord if students are to be motivated to progress in the desired directions.

Evaluation. "Development without evaluation may become quackery."

emphasized Leland Medsker at the Educational Testing Service Conference at San Francisco on May 9.[26] "One phase of evaluation must even take the form of re-examining what passes as tradition and accepted by custom, for frequently these are unconsciously misinterpreted or even willfully perverted to serve individual prejudice," states Dressel.[27] Strong accusations such as these mandate educators to get about the business of finding out "what," "why," and "how" we are doing.

Alkin lists five stages in evaluation:

1. Needs assessment -- concerned of objectives in terms of outputs
2. Planning (programming) -- concerned with information for selecting alternatives
3. Program implementation -- evaluation design
4. Program improvement -- revisions as needed
5. Program certification -- audit stage of evaluation[28]

As apparent from the review of literature concerning the evaluation of instruction, the critical factors are to establish meaningful specific behavioral objectives which are based on sound learning principles, to provide for effective instruction which is similarly based on sound learning psychology, and then determine, or evaluate, just how successful the students have been in acquiring these specific behavioral goals. Learning experiences and methods of instruction should be continuously modified and experimented with in order to develop optimum means or methods for behavioral goal acquisition. This formative type of evaluation, then, would not reach the program certification stage identified by Alkin, but would hopefully be a continuous process undertaken by sincere instructors for the purpose of developing dynamic, relevant, student-centered courses.

Another method of evaluating courses is to direct attention to the effectiveness of instruction. This type of evaluation can be accomplished by surveying the students and soliciting their views on the methods of instruction. Lehmann lists many types of rating scales, usually classified as descriptive, numerical, graphic, forced-choice, or man-to-man. He presents "A Scale to Measure Attitudes Toward Any College Course," and a universal "Student Opinionnaire." He concludes that properly constructed rating scales do have a place in the evaluation of instruction.[29] Boggs and Harracher developed a research plan for constructing a scale for attitude measurement.

> "Four steps are required for constructing the scale: (1) the determination of a referent and a population, (2) the collection of possible statements, (3) the screening of statements, and (4) the selection of screened statements of scale items.[30]

These two evaluation plans, one, based on measurement of student achievement of specific behavioral objectives, and the second, based on the evaluation of instruction by students constitute specific means for evaluating curricula and instruction.

GUIDANCE 50, RECONSIDERED

Following the developmental stages suggested in the literature, the first consideration is whether or not the course is in keeping with the philosophy of the institution. The existing course objectives clearly affirm that the intentions of this course are in harmony with the philosophy and purposes of the College.

Course Objectives. The existing course objectives are not listed in specific behavioral terms. In order to provide for meaningful evaluation which would measure how well the students are profiting (learning) from the course, these objectives will need to be modified. A second need is to re-evaluate these objectives in terms of their relevancy for students, in terms of their importance compared to other alternatives, and in terms of principles of learning. A third need is to determine the specific observable or measurable behavioral changes which students would exhibit.

As outlined in the earlier review of the course, its total development has been a department activity. All staff members have been involved in its formation, including the selection of objectives and the determination of learning experiences. This involvement is more than a committee activity. The need for staff participation in course revision and evaluation work is essential to the motivation and attitude of each counselor. The task here then, is one of how to provide motivation for revising the course.

Suggested revisions (developed as examples for refinement by committee action) of course objectives so that they are specified in terms of specific behavioral goals are as follows:

1. (existing) To provide an opportunity for new students to obtain assistance in orientation and adjustment to college.

   Suggested revisions:

   a) Given a General Bulletin and a take-home test designed to measure student knowledge of college services and regulations, the student will answer a large percentage (to be determined) of the questions correctly.

   b) The student will observe the official deadlines for filing physical education excuses, dropping classes without penalty, filing petitions, etc.

   c) The student will observe specific procedures for obtaining a library card, for dropping a class, for registration, for withdrawal, etc.

2. (existing) To assist students in the evaluation of their previous educational achievements, and the appraisal of their interests and abilities.

   Suggested revisions:

   a) Given a test score report form which includes interpretive information about the scores and a supporting lecture, the student will be able to explain (degree and manner of explanation to be determined) his percentile scores.

   b) Given information about the high school tract programs, the student will be able to indicate (method and criteria to be established) which program he was in and what the basic differences in the tracts are.

   c) Given information about the probabilities of success in given courses for various ranges of abilities and the degree of student competition in various majors, the student will be able to indicate (method to be determined) whether he is in the lower, middle, or upper portion of entering students in his chosen field according to academic aptitude.

3. (existing) To assist students in the exploration and analysis of occupational opportunities for the purpose of making realistic vocational choices.

Suggested revisions:

a) Given information about the career section of the library, the student will visit (sign in and hopefully browse in) this career section.

b) Given information about his previously demonstrated academic aptitude, the student will choose a vocation reasonably commensurate (criteria to be established) with his abilities.

c) Given information about vocational choices, the student will investigate two possible career choices and provide current information about each as per instructor specifications.

4. (existing) To provide guidance in the development of effective educational plans.

Suggested revision:

The student will list in proper sequential form a two-year educational plan which will include all major courses and graduation requirements.

5. (existing) To provide an opportunity for the development of closer personal relationships between students and their counselors.

Suggested revision:

The student will voluntarily (for purposes other than obtaining a signature) schedule an appointment with his counselor during his stay at the College.

Instruction and Learning. As the course is presently conducted, several practices would not be supported theoretically. One apparent discrepancy concerns the required designation of the course. Principles of learning emphasize the need for considering the "entering behavior" of the student, and current practices could result in many reluctant learners or should we say "compliers" or "dropouts". Significantly however, Hartley found at Shoreline Community College in Seattle, Washington that only 43 percent of the new freshmen attended four or more of the scheduled six

orientation to college sessions. He also found (similar to our evaluation findings) that more emphasis on career planning was suggested.[31]

With the proposed revision in course objectives so that specific observable behavioral changes could be evaluated, alternate methods of instruction would be encouraged. Particularly, experimentation with programed instruction techniques, fashioned after Golden West College's student guidance manual, would be encouraged. Krumboltz's monograph on Stating the Goals of Counseling lends impetus to these experiments.[32]

Another very important aspect of instruction and learning which should be concentrated on is motivation of students. Perhaps motivation should be a first specific objective of the course even if ways can't be found to measure this charismatic ingredient. Regardless, particular teaching skills must be found to motivate students for this decision-making course.

EVALUATION PLAN

Originally, when this evaluation project was conceived of, it was anticipated that this plan would be a detailed statistically supported scheme for measurement. However, a review of the literature and an analysis of the problem soon disclosed, as reported earlier, that evaluation is just one part of curriculum development. It was obvious, that a specific evaluation plan could not be developed if the course structure was loose. There would be no value in applying stringent measurement techniques to data that could not be attributed to specific behavioral objectives. Interpretations of applied measurements would necessarily be subjective, and biased, if applied to the existing framework.

A second logical alternative was to devise an attitude measurement instrument and evaluate the course based on student opinion. This alternative had merit but opportunities for a pre-test and post-test were not available so the legitimacy of an opinionnaire, which had been utilized before, did not provide for an improved evaluation, at least not an improvement on strategy as both would be after the fact without the benefit of advanced planning.

The evaluation plan became just that, a plan for future evaluation plus, a plan for course revision. Course revision plans would, of course, involve the whole staff and an evaluation plan would be subject to those revisions. The following developmental stages are listed as a plan for meaningful course revision and evaluation.

First, pertinent curriculum revision data must be synthesized and prepared for the staff. This would possibly serve to motivate and/or to

stimulate action for course revision and evaluation. As noted earlier, committee action is preferred, but it is essential that working terms be explicitly defined prior to discussions. It is hoped that an informal presentation of this project report would serve both to motivate action and to define terms.

Second, the process of formulating specific behavioral objectives would be undertaken. It is anticipated that the usual controversies would develop over terminology such as "to understand" or "to adjust", and hopefully, specific meaningful objectives would be formed which would meet the three criteria of (1) specifying a student action or product of such action, (2) stating the conditions under which the performance will occur, and (3) establishing a minimum performance criterion, a standard.[33] This second step is the most critical of all the planned evaluation steps.

Third, given a set of specific behavioral objectives, a system will be established to account for specific behavior of students. For example, a system of accounting for students visiting the career section of the library will be established. Similarly, a system of accounting for long-range objective behavior such as scheduling a voluntary counseling interview will be established.

Fourth, specific instructional techniques which provide for motivation, outlining goals, organizing instruction and grading assignments against an established criterion will be delineated. This will not be done for regimental purposes, but rather to assure that the instruction and learning experiences will be based on learning psychology.

Fifth a pre-test and post-test instrument tied to the specific objectives will be developed. John Darley and Gordon Anderson recommend this more

direct, scientific approach particularly in programs which emphasize educational and vocational guidance and planning.[34] For example, a series of questions could be directed at evaluating a student's vocational choice to measure his knowledge of his choice before and after the course.

Sixth, the student evaluation instrument will be designed in accordance with the attitude assessment technique previously described. The instrument will provide more objectivity and validity. Administration of this instrument immediately after the conclusion of the course, and again at an exit interview or after a year's time has passed, will provide additional evaluative information.

This evaluation plan as outlined is ambitious and may, as so many committee actions do, take longer to develop than planned. Furthermore, the plan itself may be revised as all phases of the program are considered. However, the time consuming efforts directed at establishing specific behavioral objectives for purposes of improving learning experiences for an estimated four thousand students next year (and more each year thereafter) can hardly be written off as time wasted.

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APPENDIX A

MT. SAN ANTONIO COLLEGE
Office of Instruction

COURSE OUTLINE

DEPARTMENT: Counseling and Guidance GRADED COURSE CRITERION NO.: 1

PREPARED BY: Dept. Committee DEPT. CHAIRMAN: Bruce L. Paulson

COURSE TITLE: Orientation and Guidance 50

COURSE NUMBER: _____ UNITS PER SEMESTER: ½
9 weeks beginning the 2nd wk. of

HOURS PER WEEK: Lecture: 1 Hr. Laboratory: the semester.

PREREQUISITES: None

COURSE DESCRIPTION: This group guidance course is required of new day students and includes presentations and class activities to assist students in their (1) adjustment to college, (2) evaluation of interests and abilities, (3) determination of realistic vocational goals, and (4) development of effective educational plans.

TEXT:

Author: _____

Title: Mt. San Antonio College General Bulletin

Publisher: Mt. San Antonio College

Edition: _____ Year: Current

REFERENCE MATERIALS: _____

DATE APPROVED: 3/28/67

REVIEWED FOR:

2nd. Yr. Date Initial

3rd. Yr. Date Initial

DESCRIPTION OF CONTENT:

Week	Hours	Topic or Class Activity
1	1	Topic: Introduction to course, role of Junior College, and college services available for students.
		Activity: (1) Lecture and discussion (2) Assignments
2	1	Topic: Orientation and adjustment to college, academic rules and regulations and college opportunities available for students.
		Activity: Discussion & Review of Assignment #1 - Rules & Regulations
3	1	Topic: Discussion of student concerns, problems, questions, etc. as related to adjustment to college and decisions on vocational and educational goals.
		Activity: (1) Small group discussions and class review of topics. (2) Assignment #2 - Exploration of goals.
4	1	Topic: Continued discussion of student problems and concerns with emphasis given to study skills.
		Activity: (1) Lecture and discussion.
5	1	Topic: Evaluation of student educational background, achievements and grade averages, abilities & interests.
		Activity: (1) Lecture and discussion on test score interpretation, (2) student analyses of records, and (3) Assignment #3 - Objective Data Profile.
6	1	Topic: Exploring occupational opportunities, analyzing levels of education & training required in various occupations, and determining bases for choosing or reinforcing a vocational field.
		Activity: (1) Lecture and class discussion or use of appropriate visual aid material, (2) Assignment #4 - Research on occupational information.
7	1	Topic: Determining an educational major consistent with abilities, interests, and vocational goal.
		Activity: Class discussion.
8	1	Topic: Development of an effective educational plan by semesters to include units and a specific course of study.
		Activity: (1) Class Assignment #5 - Educational plan.
9	1	Topic: Review of educational and vocational plans. Activity: (1) Class discussion (2) Report including assignments due.

OBJECTIVES:

1. To provide an opportunity for new students to obtain assistance in orientation and adjustment to college.
2. To assist students in the evaluation of their previous educational achievements, and the appraisal of their interests and abilities.
3. To assist students in the exploration and analysis of occupational opportunities for the purposes of making realistic vocational decisions.
4. To provide guidance in the development of effective educational plans.
5. To provide an opportunity for the development of closer personal relationships between students and their counselors.

METHODS OF INSTRUCTION:

1. Lecture
2. Discussion
3. Research assignments
4. Audio-visual aids

METHODS OF EVALUATION:

1. Assignments and report to be evaluated.
2. Class participation and attendance.

REMARKS:

Traditional methods of presenting information for mastery by the student and grading standards based on assimilation of such information will be relegated to a lesser position in these guidance classes.

The prime objectives will be to involve students personally in meaningful group interaction for resolution of problems concerning adjustment to college and to provide guidance to these students as they deliberate on realistic vocational goals and educational plans.

APPENDIX B

STUDENTS' EVALUATION OF ORIENTATION AND GUIDANCE

Directions: For each item or statement below fill in the number on the answer sheet which best describes your feelings or opinion: 1. very helpful 2. helpful 3. slightly helpful 4. not helpful 5. not covered.

Topics

1. College services; Health, Placement, etc.
2. College rules and regulations
3. Adjustment to college
4. Personal problems and concerns
5. Study skills
6. Evaluation of high school grades
7. Evaluation of abilities
8. Test score interpretation
9. Exploration of occupations
10. Educational majors
11. Four-year college requirements
12. Educational program planning

Forms, Charts and Assignment Sheets

13. General information test
14. High school grade charts
15. Test score profile sheet
16. Vocational analysis forms
17. Tips on how to study
18. Study and work schedule
19. Weekly time budget
20. Course list worksheet
21. Instructions for completing educational plan
22. Educational plan

Teacher's Methods and Techniques

23. Overhead projection of forms and charts
24. Presentation of slides
25. Lectures
26. Oral instructions for completing forms and charts
27. Answering questions
28. Having class discussions
29. Having small group discussions
30. Having panel discussions
31. Helping me learn about myself
32. Helping me make my own decisions about my future goals

APPENDIX C

COURSE EVALUATION

Please complete the following statements. Your evaluation remarks will be very helpful in planning the course in the future. Feel free to make whatever comments you would like.

1. The course has been most helpful in

2. The course would have been more helpful if

3, The course would have been more effective if the teacher had

4. Additional comments